

The Challenges and Opportunities of IS Programs in Addressing Societal Challenge of Military Veteran Undergraduate Education & Integration

Emergent Research Forum (ERF) Paper

Introduction

The importance of veterans in the workforce should not be undervalued. The absence of their workforce integration means that the community misses out on those who are globally experienced, have team orientation, and are result driven (Bailey et al. 2019; Mosakowski et al. 2013). They bring a rich perspective rooted in their training and the exposure to organizational and global cultures. Furthermore, veterans have significant project management experience, exposure to systems and technologies, understand the role of data-driven decision making, and the impact of cybersecurity due to their exposure to military strategic and tactical activities. These experiences are well aligned with the foundational concepts underpinning Information Systems (IS) academic and professional disciplines. Despite this alignment, the number of military veterans enrolled in IS undergraduate programs remain small.

Information Systems (IS) discipline aims to meet educational goals and workforce demands by educating students on highly relevant topics such as data management, data analytics, and cybersecurity. Despite this relevancy and the exponential growth in organizations' hiring and talent needs in data-focused skills, business schools face stagnant ungraduated IS enrollment and declining overall undergraduate enrollment (Li et al. 2014; Nietzel 2019). At the same time, over 2.5 million Americans who served in the wars in Afghanistan and Iraq (Marr 2018) are facing challenges with reintegration into civilian life and completion of their post-secondary degrees (Barr 2015). In this emergent work in progress research, we will explore the post-secondary education veteran challenges and suggest the need to conduct further research to help understand ways in which the IS academic community has an opportunity to not only target these already valuable candidates but also help to address the challenges they face by spearheading advocacy for the group. We will explore these issues in our research by 1) discussing the relevancy of the issue in the context of declining enrollments and the increasing demand for technologically-skilled talent, 2) identifying and categorizing manuscripts into relevant topics, as well as 3) suggesting future research.

Background

In the context of declining undergraduate (Nietzel 2019) and, surprisingly, stagnant IS enrollment (Herath 2015), organizations depend on securing workforce talent that is responsive to everchanging skills and requirements that are largely driven by the current digital revolution and the resulting implementation of more automated tools (ZYSMAN and KENNEY 2018). At the same time, competencies that remain relevant are project management, an understanding of how information systems enable competitive advantage and having a general business understanding to connect the gaps between information technology and business operations. Organizations look to business academic programs, specifically IS programs, to co-create educational experiences and supply a talent pool capable of meaningful impact from the moment they graduate and enter the workforce. Given military veterans' unique predispositions and skillset, we suggest that IS programs have a unique opportunity to mitigate declining undergraduate enrollment, address the acute societal challenge of veterans' integration, and provide an exceptional talent pool to employers by focusing on recruiting the underserved veteran population.

For this research, veterans are defined as those who served in the military post- high school. More than 10 million veterans over the age of 25 will not have their post-secondary degree ("Factsheets, Veterans in Higher Education" n.d.). In light of 9/11, it was identified that many veterans were losing their benefits due to not finishing or attending school within the 10-year separation window. As a result, the Post-9/11 Veterans Education Affairs (VEA) Act of 2008 was enacted in June of 2008. The bill's appeal is that its

success was measured on how much assistance was afforded to veterans and not how timely that assistance was given (Shankar 2009). The VEA act further amplifies the appropriateness of focusing on military veterans, as the act significantly reduces the threat of accruing large student debt by enrolling in a higher education institution.

Beyond understanding the implications of the size of the veteran population and their financial realities, it is important to note veterans' potential contribution to the IS community. More specifically, veterans bring a great deal of interpersonal and technical skills as they exit the military (Bergman and Herd 2017). This is reinforced with a high level of team orientation as the basics of military training emphasizes success as a unit and not the individual (Bailey et al. 2019). In addition to this, veterans returning to school tend to be from a working-class background as well as older than the average student. Consequently, they bring a different level of maturity and life experiences in contrast to their traditional peers who are entering college straight out of high school. Including veterans, would expose other students to more diversity while encouraging veterans to share their work experiences.

Having (i) identified the challenges of stagnant and declining enrollments, (ii) identified veterans as a segment of population in need of civilian life integration, and (iii) acknowledged the unique value veterans can bring to IS academic discipline and the marketplace, in the next section we provide a literature summary focused on understanding veteran education challenges. An understanding of those challenges is required to help inform and guide future research on how IS programs can play their part in addressing this important societal issue.

Veteran Enrollment and Integration Challenges – Literature Review

In our literature review, we considered questions about veteran education from both civilian and military perspectives. Our initial queries¹ returned 240 articles, and after reading the abstracts for each, we were able to reduce the list to 32 relevant articles. Those manuscripts revealed twelve themes embedded in four larger contexts: social-economic concerns, social challenges for veterans, long-term impact on veterans and their career with the absence of a college degree, and finally, gaps that exist within higher learning institutions (Table 1).

Larger Context	Themes	Manuscripts
Socio-Economic	<ul style="list-style-type: none"> Lower-income First-time student Financial obligations 	(Barr 2015; Callahan and Jarrat 2014; Elbogen et al. 2013; Fernandez et al. 2019; Minsky, Esq. 2019; Renna and Weinstein 2019; Rumery et al. 2018; Simon et al. 2010; Tamborini et al. 2019)
Social impact on Veterans	<ul style="list-style-type: none"> Challenges with veteran identity Family obligations Post-Traumatic Stress Disorder 	(Albright et al. 2019; Arney and Lipow 2016; Campbell and Riggs 2015; De Tray 1982; Elbogen et al. 2013; Keeling et al. 2018; Mani 2001; Mosakowski et al. 2013; Ness et al. 2015; Olsen et al. 2014; Phelps 2015; Rabac 2019; Richardson et al. 2019; Shankar 2009; Smith et al. 2017)
Career Outcomes	<ul style="list-style-type: none"> Career opportunities Salary Gender gaps (women) 	(Arney and Lipow 2016; Bailey et al. 2019; Barry 2015; Callahan and Jarrat 2014; De Tray 1982; Keeling et al. 2018; Mani 2001; Minsky, Esq. 2019; Mosakowski et al. 2013; Rabac 2019; Renna and Weinstein 2019; Steele et al. 2018)
Higher Education Gaps	<ul style="list-style-type: none"> Lack of structure Advocacy Classroom 	(Albright et al. 2019; Bailey et al. 2019; Barr 2015; Barry 2015, 2015; Callahan and Jarrat 2014; Campbell and Riggs 2015; Fernandez et al. 2019; Griffin and Gilbert 2015; Hitt et al. 2015; Keeling et al. 2018; Maclean 2018; Mosakowski et al. 2013; Olsen et al. 2014; Osborne 2013; Phelps 2015; Rabac 2019; Richardson et al. 2019; Smith et al. 2017)

Table 1

¹ Databases: Business Source Complete, Educational Administration Abstracts, Military & Government Collection, Query: "Veterans" AND ("Enrollment" OR "Education" OR "Undergraduate" OR "Information Systems"), Peer-Reviewed, Journal Article Articles, Conference Proceedings.

Challenges that contribute to the socio-economic larger context are focused on veterans and their background before entering the military. A significant portion of the population entering the military are from lower-income backgrounds and are often the first in their family to achieve post-secondary education (Barr 2015). This population achieves social mobility by entering the military and is exposed to diverse social experiences (Renna and Weinstein 2019), but at the same time become members of a tight niche community (Griffin and Gilbert 2015). The tension between the two is amplified through challenges that are similarly faced by minority students such as stereotypes, tokenism and the perception of low ability to enter college (Fernandez et al. 2019). This social distance is compounded by veterans' perception of traditional peers lacking certain life experiences and maturity (Bergman and Herd 2017).

Older students face other challenges that someone fresh out of high school would not typically face. Already being in their mid-twenties (Bergman and Herd 2017), many veterans must financially support their families, often in contrast to the obligations of the typical (traditional) college student. Although having educational benefits (the VEA act), the financial burden of supporting their families deters veterans from going back to school full-time (Callahan and Jarrat 2014). The consequences of these realities, documented gender gaps both in the IS profession and veteran population (Albright et al. 2019), and the resulting lack of a college degree leads to veterans having a stagnant career and salary growth (Bergman and Herd 2017; Callahan and Jarrat 2014).

At the academic level, veterans find it challenging to adapt to the fluidity of higher education due to their exposure to the hierarchical structure of the military (Callahan and Jarrat 2014). The majority of faculty is unaware of the impact of transitioning between two organizational styles (Callahan and Jarrat 2014). Furthermore, faculty unawareness leads to the absence of advocacy within higher learning institutions specific to veterans which impacts them socially. A study found that faculty and students viewed those who joined the military as 'not college material' (Fernandez et al. 2019). Without having any awareness training, the majority of those outside of the military community hold this opinion and therefore are bias against those students. For example, the lack of support from administration and faculty leads to veterans being associated with violence and non-military people projecting their dissatisfaction with the government onto veterans (Fernandez et al. 2019). Instances like this exacerbate the social distance between veterans and the rest of the student population.

Next Steps and Conclusion

In this emergent research paper, we reviewed the relevant literature to help us identify potential reasons influencing societal, institutional and individual challenges that prevent a more substantial entry of veterans into post-secondary education and subsequent career. Informed by these findings, in the next phase of this research, we plan to focus on how IS curriculum, IS faculty engagement with veterans, and IS department interaction with university administration should improve to more effectively address the challenge of veteran integration into post-secondary education. In the process we plan to 1) conduct a series of in-depth interviews with veteran students to assess our literature review findings and improve upon those, 2) develop a survey instrument to target veteran student population to help understand the relationships between individual and organizational factors influencing veterans' IS post-secondary enrollment, and 3) develop a survey targeting IS faculty to measure biases and perceptions toward veteran students.

To the best of our knowledge, our emergent research forum paper represents the first IS-focused attempt to critically evaluate veterans' post-secondary education challenges and identify an opportunity to address concerns for both IS program enrollments and the veteran community post-military integration. Instead of seeing the two challenges as separate problems and in isolation, the synergies between them can be a conduit of addressing both more effectively. In doing so, the IS academic and professional communities can be enriched with the highly skilled and often forgotten potential of military veterans. Likewise, veterans' lives can be enriched by gaining meaningful careers which can help them live more fruitful lives, thus positively impacting society. We invite other researchers to join us in this important effort.

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